

THE IMPACT OF FACILITIES ON TRAINING EFFECTIVENESS

EXECUTIVE LEADERSHIP

BY: Rick Moody
Des Moines Fire Department
Des Moines, Iowa

An applied research project submitted to the National Fire Academy as part of the
Executive Fire Officer Program.

October 2004

CERTIFICATION STATEMENT

I hereby certify that this paper constitutes my own product, that where the language of others is set forth, quotation marks so indicate, and that appropriate credit is given where I have used the language, ideas, expressions, or writings of another.

Signed: _____

ABSTRACT

The problem was that the Des Moines Fire Department was not able to train new recruits to local and national standards, nor could it maintain the skills of current members or implement new procedures due to a lack of permanent training facilities. The purpose of the project was to explore possible solutions to the lack of training facilities.

A feedback instrument, literature review, and personal interviews were used to answer the following research questions were posed: (1) In what ways is the current DMFD training program limited by its facilities? (2) What type of facilities do other public safety agencies utilize for training purposes? (3) How do those facilities impact the effectiveness of those agencies' training programs? (4) What alternatives are there to building a new facility for the DMFD?

The results found that the use of dedicated training facilities provides numerous benefits and partnerships with other departments was a viable alternative.

At the conclusion of this project it was recommended that the Des Moines Fire Department move forward with a proposal for a new training facility and approach other departments in the area to explore partnerships.

TABLE OF CONTENTS

ABSTRACT	3
TABLE OF CONTENTS	4
INTRODUCTION.....	5
BACKGROUND AND SIGNIFICANCE.....	6
LITERATURE REVIEW.....	8
PROCEDURES.....	12
RESULTS.....	15
DISCUSSION.....	20
RECOMMENDATIONS.....	21
REFERENCES.....	23
APPENDIX A (FEEDBACK INSTRUMENT).....	24
APPENDIX B (DEPARTMENTS RESPONDING TO FEEBBACK INSTRUMENT).....	28

INTRODUCTION

Training has always been an important part of a well-prepared fire department, and as local and national standards change, it is important that fire departments adapt to those changes. By necessity, these changes require departments to assess their facilities. More and more fire departments are looking to expand existing facilities or create new facilities with the technology and versatility needed to keep up with changes in the industry.

The Des Moines Fire Department (DMFD) does not have a facility specifically dedicated for the use of training. Instead, the department utilizes multiple properties throughout the city to conduct all aspects of its training, often on a temporary basis.

The problem is that the DMFD is not able to train new recruits to local and national standards, nor can it maintain the skills of current members or implement new procedures due to a lack of permanent training facilities.

This applied research project was designed to explore possible solutions to the lack of training facilities in the DMFD and make recommendations for the development of a permanent facility dedicated to firefighter preparedness.

Descriptive research methods conducted in the form a feedback instrument distributed to fire officials across the country and interviews conducted with DMFD training officials were used to answer the following questions:

1. In what ways is the current DMFD training program limited by its facilities?
2. What type of facilities do other public safety agencies utilize for training purposes?

3. How do those facilities impact the effectiveness of those agencies' training programs?
4. What alternatives are there to building a new facility for the DMFD?

BACKGROUND AND SIGNIFICANCE

"Higher state and federal standards, a general increase in the number of firefighting recruits, and the ever-present and increasing threat of lawsuits have spurred many departments to take a second look at their training facilities, and many are seeing shortfalls there" (Booth, 2000, p. 6). This statement sums up the issues currently confronting many fire departments, including the DMFD.

The DMFD is a medium-size fire department that serves an area determined by the 2000 census to be occupied by approximately 198,000 people. The department serves an area that is 77.4 square miles through 10 stations.

The past seven training academies have averaged 22 trainees, with the most recent academy having reached 35 (D. Bunting, personal communication, September 24, 2004).

Without a training center, the training staff is dependent on property owners to allow them to use parking lots and buildings for training exercises. They also occasionally travel to other agencies and use training props they have located on their properties. Training classes have been known to travel 15 minutes to use the West Des Moines Fire Department's tower for rope rescue and live fire training or a half an hour to the Fire Service Bureau in Ames, Iowa, to use a burn trailer (C. Hulgán, personal communication, September 24, 2004).

DMFD training officer Dale Bunting (personal communication, September 24, 2004) explained, "Much of the training is done by the company officers at each station who will often utilize opportunities in their territory to conduct hands-on training. With different sites and locations, it is more difficult to train personnel with any consistency. A dedicated facility would improve this condition."

DMFD assistant training officer Charles Hulkan (personal communication, September 24, 2004) describes a situation with the current recruit class. "We are having classroom sessions in a converted store. We have to move tables, chairs, projectors, computers, etc., to this location for the duration of the training then move it all out after we're done only to have to move it someplace else the next time. For some classes, we will have classroom sessions in the morning and have to travel someplace to do evolutions. We are also hampered by the lack of a place to store apparatus during this time period; additional time will be lost traveling from wherever the apparatus is stored to the training site."

The lack of a fixed, permanent training facility presents a hardship for the department and has the potential to compromise the effectiveness of the department's training efforts. The current situation offers an opportunity to explore the possibilities of building a training facility for the department.

The Executive Leadership course plays a role in solving this problem in relation to decision-making, in that it will serve to help define the problem and help inform the decision. It also involves influencing styles and will help in finding specific arguments to support a facility.

Additionally, the effort to explore the issue of a training facility is in accordance with the U.S. Fire Administration's five-year operational objective to "appropriately respond in a timely manner to emergent issues" (U.S. Fire Administration, 2004).

LITERATURE REVIEW

There is a wide body of literature available addressing the issues of training structures, and many articles offer advice on how to go about designing and building a training facility.

Booth (2000, p. 67) advised that the best approach is to create a business plan for a training facility as part of the proposal process and walks readers through the process, explaining, "Fire departments and other public service entities often find that getting from the first step, the needs assessment, to the second step, obtaining funding, is one of the most daunting aspects of moving forward."

Booth (2000) made some recommendations for those who face the obstacle of tight budgets, including partnering with other departments or public service organizations. Additionally, "a business plan can also facilitate phased funding plans in the case of multi-year or multi-grant efforts" (p. 67).

Acomb (2001) agreed that careful planning can help stations stretch their budgets when it comes to building new facilities. "The first step is to generate a wish list of the types of training and opportunities that your fire department would like to make available both your staff and the general public" (p. 44).

Acomb (2001), an architect, used the example of a small fire department whose apparatus bay was designed to be used for training as well. They created mock window

openings in the mezzanine of the apparatus bay, from which firefighters could repel, and the space also was enclosed with a wall and a door that would facilitate search-and-rescue training. He called this a more “holistic” approach to design (p. 45-47).

Acomb (2001) added:

The final design of your new or renovated fire station is primarily a result of the construction budget available. For many fire departments, accountability to the budget is paramount to the project’s success. In other words, creative thinking and strong listening skills will pay off, even if local government leaders understand the value of on-site training and increase the budget to accommodate it. ... The key is to focus on the existing elements of the building design and see how they can be enhanced for training. (p. 47)

In examining a new state-of-the-art training facility in Tarrant County, Texas, Patterson (2003) discussed how the tragic events of the Sept. 11, 2001, terrorist attacks heightened the public’s awareness of improving firefighting and rescue techniques, an effect that has given the new Tarrant County College (TCC) Fire Service Training Center more emphasis (p. 53).

Patterson (2003) also emphasized that student proximity to hands-on training is crucial in training, quoting TCC Fire Service Training Center coordinator Tommy Abercrombie as saying, “We wanted, overall, to marry the hands-on activities with the classroom environment in such a way that the student would have little difficulty adjusting from one to the other” (p. 53).

Patterson (2003) mentioned one other benefit that may aid in gaining public support for a training center: “Beyond the obvious advantage of having well-trained

firefighters and rescue personnel, homeowners, for instance, may realize savings in insurance rates because of the availability of increased fire training” (p. 54).

A popular alternative for those departments that can't afford to build its own training centers is to partner with other organizations, either municipal or private-sector.

The trend in creating partnerships in building and maintaining training facilities began in the 1970s (1991, Michard, p. 43). But as Oregon, Ohio, fire chief Ray Walendzak explained:

The early efforts failed, because of a lack of interest by enough parties. But with the enactment of stricter environmental and training requirements, a facility like this one is mandatory for a community with such a heavy concentration of industry. Furthermore, it would be cost prohibitive for each entity to duplicate these facilities. (Michard, 1991, p. 43).

In the instance documented in the article, each member of the users group offset the cost of the facility by providing assistance in the form of cash, labor, or donated equipment. “One advantage of such an arrangement is that our facility can be improved by drawing on a wide range of resources without relying capital expenditures for everything we need,” Walendzak said. (Michard 1991 p. 43)

Meyer (1990) examined regional training organizations as an alternative for smaller departments. Even then, “The combined effects of increasing requirements and decreasing resources is forcing fire service managers to do more with less. One answer to the increasing requirements and regulations is additional training” (p.28).

By sharing expenses, typically prohibitive training costs become affordable and thus expand the individual organizations' training potential. In addition, the group is able

to avoid duplication of resources among neighboring fire departments (Meyer, 1990, p. 29).

Schumacher (1988) noted a “less obvious” side effect of sharing training facilities (p. 18). In an examination of a partnership between Denver, Colorado, and suburban Aurora, he found the staffs of both fire departments were able to learn from one another.

Denver’s suppression division, for example, responds to more large working fires and unusual rescue calls than Aurora’s. The joint training center exposes Aurora’s staff to Denver’s valuable field experience and fire ground lessons. Denver’s personnel, on the other hand, can evaluate Aurora’s experimental programs and new equipment. (Schumacher, 1988, p. 18)

Lobeto (2002) documented yet another way to save on costs by chronicling the story of a Florida fire department that used its 53-person staff to design and construct a training facility. The construction was accomplished using three to five firefighters on the project daily in addition to other personnel who managed the materials delivery and special projects, such as electrical wiring. This effort saved the department between \$150,000 and \$200,000 in building costs (Lobeto, 2002, p. 36).

Lobeto (2002) noted, “one of the most important results of having the firefighters build their own training facility: a sense of ownership and pride. Additionally the teamwork required to tackle this project is similar to that used when mitigating emergency scenes” (p. 36).

And though the article goes on to detail some of the features of the facility, it fails to address the issue of how an already taxed department would be able to spare the staff time needed to oversee and build the facility.

In detailing how one should approach building a new fire training facility, Booth and Schoonover (2003) recommend keeping the future in mind. "Because of the costs involved, a new facility will likely be operational for 20, 30, or even 50 years down the road."

Through these sources, it becomes clear that a closer examination of how facilities affect training effectiveness must include a close look at training needs as well as alternatives such as partnerships.

PROCEDURES

The purpose of this research project was to explore possible solutions to the lack of training facilities in the DMFD and make recommendations for the development of a permanent facility dedicated to firefighter preparedness. In this effort, it was determined a feedback instrument would be best utilized, in addition to the literature review, to gather information on possible solutions available.

Feedback instrument

The feedback instrument (Appendix A) was distributed to 302 fire officials across the country via an e-mail containing a Web address at which the feedback questionnaire was housed. The e-mail served as a cover letter and detailed role of the feedback instrument in the project.

The questionnaire was posted to the Survey Monkey Web site, and e-mail recipients were pointed to that address and asked to answer the questions within two weeks of receiving the e-mail.

Officials who were sent the e-mail were not limited in terms of department size or geographic area but were asked to identify the size of their coverage area. The departments that responded to the questionnaire are listed in Appendix B. Sixty-one department officials (or 21 percent) responded.

The feedback instrument was used to determine the number of departments that used a dedicated training facility, what features those facilities featured, whether the departments shared facilities with other agencies and their perception of how those facilities affected their training efficiency. Those who did not use a dedicated training facility were asked where they conducted training, why they did not have dedicated training facilities and how they perceived the lack of training facilities affected their training effectiveness.

In addition to the feedback instrument, interviews were conducted with DMFD training officials to assess the training program currently in place and the department's needs associated with a training facility.

Definition of terms

Candidate Physical Ability Testing (CPAT): CPAT is a standardized physical ability test used by the DMFD to assess a recruit's physical ability to be a firefighter. It is a circuit event with eight individual stations, and candidates have a time limit in which to complete each station.

Dedicated training facility: This term is used to describe any facility that is used for training only. It does not include fire stations or other multi-purpose buildings that have training features.

Assumptions and Limitations

In the facilitation of the feedback instrument used in this applied research project, it is assumed that those answering the questionnaire were qualified by their roles as department officials to speak authoritatively on their department's use or lack of a training facility, and that they answered the questions honestly.

This applied research project contained limitations involving the lack of a scientific sample used for the feedback instrument. In addition, the feedback instrument gathered more anecdotal evidence than scientific. Another limitation was that due to practical issues, the researcher was unable to visit other training facilities and conduct personal interviews training officers from departments outside the DMFD. The lack of ongoing records measuring the effectiveness of the DMFD training was also seen as a limitation. A final limitation involved the body of published material available; much of the literature available on training facilities dealt directly with building plans for specific structures, such as burn buildings or training towers, and did not explore the effectiveness of such facilities on training.

RESULTS

Research Question 1. In what ways is the current DMFD training program limited by its facilities?

DMFD has never used a dedicated training facility and must deal with temporary spaces in many cases. Currently, the departments train in and on buildings that may or may not be available for training by the whole department, such as a parking ramp recently torn down. According to DMFD training officer Bunting:

“This structure was ideal for a high-rise drill, but due to the demolition contractor’s need to get the building down quickly, we were unable to get our fire companies in for drills. We used the West Des Moines training tower to perform this drill but the stairway layout was not as realistic as the parking ramp stair tower.” (D. Bunting, personal communication, September 24, 2004)

Bunting explained that the DMFD has incorporated the CPAT into its firefighter hiring process. The equipment for this test costs more than \$30,000 and must be kept inside in a climate-controlled building. However, there is no facility in Des Moines suitable to store and set up the equipment, so it must be stored at another department 15-20 minutes away. Having a facility to set the CPAT course up and leave up for candidates as well as incumbent firefighters would be ideal (D. Bunting, personal communication, September 24, 2004).

Because of the temporary nature of the spaces used for training, Hulgan explains, “It is difficult because of the uncertainty of where and when an opportunity will present itself and then scheduling all personnel to take advantage of the window of opportunity” (C. Hulgan, personal communication, September 24, 2004).

Hulgan advised:

A dedicated facility would provide a place to train all times of the year and would not be dependant on properties that were available on a day-by-day basis. Fire companies would know in advance where and when the training would take place, allowing the company officer to plan his crew's training itinerary a year in advance. A dedicated training facility would open up opportunities to bring in outside training and offering the training to other metro departments (C. Hulgan, personal communication, September 24, 2004).

Bunting added that one of the most pressing problems experienced by the department is getting people together for training. "When we go to the stations there is the constant problem of telephones ringing," he said. "With a training complex everyone would know where to go all the time – now we go wherever we can beg room" (D. Bunting, personal communication, September 24, 2004).

In the feedback instrument results, 38.5 percent of respondents did not have a facility specifically dedicated to training. Those respondents were asked to comment on how they thought the lack of access to a dedicated training facility affected their training effectiveness, and many echoed Bunting and Hulgan's concerns.

A common observation was that scheduling and travel issues were time consuming and, in some cases, added another layer of cost to training.

One respondent commented:

Being without a training facility has impacted our skills level. We did no company evolutions for about three years until we started using the fire tower of the neighboring department. When we started conducting these exercises, we

discovered a significant deficiency in the basic skills level of many personnel in what I call "Firefighting 101" level training. When firefighters are called upon to respond, they have only two things to fall back on, their experience and their training. We are a very young department with little experience and so consequently, we cannot skimp on the training aspect.

Others listed problems with continuity in training, attitude from firefighters who see training as a hassle, and a lack of quality and depth in training as concerns.

One response to the question read, "I think with the lack of training facilities we have a very chaotic fire scene. We have very ineffective commands and therefore very poor attacks on the fire."

Though most respondents without a dedicated training facility saw a negative impact on training effectiveness, that sentiment was not universal. A small percentage answered that they were able to improvise and adjust, and they experienced no negative impact.

Research Question 2: What type of facilities do other public safety agencies utilize for training purposes?

Of those fire officials who responded to the survey, 61.5 percent used a facility specifically dedicated to training, and 64.1 percent used a stand-alone facility, while 15.4 percent used facilities that were part of a fire station. Twenty percent chose the "other" option and their descriptions included:

1. Classroom is part of a fire station and we have a three-story training tower with a built-in maze.

2. Building at local college.
3. Training room in station - drill grounds rented from other jurisdictions.
4. Office and classrooms adjacent to a fire station.
5. Training officer located in station, separate training tower.
6. Located at local community college.
7. Part of fire marshal's office
8. It is its own building attached to one of our fire stations.

When asked what types of training their facilities supported, the two most popular options chosen were “classroom training” and “ground ladder evolutions” which were chosen by 94.6 percent of those with dedicated training facilities. The least popular feature was water diversion, with 24.3 percent.

Features used by more than 75 percent of respondents included hose advancement and stairwell evolutions, search and rescue, and rapelling. CPR classes and close space rescue were next.

Of those who did not have a dedicated training facility, many were making due with off-site classroom facilities, parking lots, gyms, abandoned, or donated houses, or other departments’ facilities.

Research Question 3: How do those facilities impact the effectiveness of those agencies’ training programs?

Additionally, those who did have dedicated training facilities noted that it positively impacted their training. Respondents with dedicated training facilities explained that they could concentrate more on the training itself and less on scheduling

and coordinating the site and taking time to travel to training. A common theme in these answers was that the accessibility and control trainers had over the environment enhanced their training. Having a dedicated site also cuts down on distractions respondents reported.

A common theme was that a dedicated facility allows departments to be flexible, even in terms of equipment. “We don't have to set-up and break-down training props every time we do a training drill,” one respondent reported.

Another responded:

Without a facility, less creative training evolutions would prevail. When firefighters are at the facility, it provides an “educational” air that is not replicated in your normal fire house setting. If a department says that training is a priority, I am not sure how they can justify that philosophy without a facility of props, etc., to facilitate such beliefs.

Safety was another important issue to respondents, as shown in this response: “It helps provide a realistic, safe method of training. You don't need to improvise to cover some particular training need — this maintains a greater degree of safety. Safety features are all calculated into the buildings and grounds. When you have to make-believe on components, it really takes away from the realism.”

One official from a growing department explained, “Without our training facility, we could not keep up with the training required within our department. We are the seventh fastest growing city in the country. I have had to promote over half the department. I have hired 32 firefighters in the last 18 months. In our department if you are not responding to emergency calls, it is required that you are training. Training is so

important to our department that it is the number one priority along with responding to emergencies. The training facility has made it possible for use to provide quality training and keep our units close to the first in areas. We could not survive without it.”

Research Question 4: What alternatives are there to building a new facility for the DMFD?

Of those departments that did not have dedicated training facilities, the most common reason was budget, and some mentioned lack of available property to purchase. One respondent noted that the city administrators didn’t think it was necessary,

Of those who did have dedicated facilities, 61.5 percent shared their facilities with other organizations. Most shared with other departments in their surrounding areas, but two shared with a police department. Some owned the facility and charged a small fee to other departments who use it, which offset maintenance costs.

Few other alternatives presented themselves through the feedback instrument, other than sharing facilities or looking for existing spaces such as community colleges.

DISCUSSION

In many ways, the responses to the feedback instrument echoed the discussions found in the literature, and in many cases expanded upon published material by offering anecdotal evidence.

The body of literature and the opinion of many fire officials across the country as gathered through the feedback instrument seem to indicate access to a dedicated training facility improves training in many ways, particularly by removing distractions,

allowing for a more controlled and realistic environment, improving the safety of training, making it easier to coordinate and schedule training, making training more efficient by cutting down on travel time, and making it easier to maintain necessary equipment. However, it is difficult to find hard evidence that moves beyond the anecdotal to show that a lack of training facilities necessarily negatively impacts training effectiveness.

Nonetheless, both the literature and the feedback reveal that if a strong training program is a department priority, serious consideration must be given to making a commitment to build a dedicated facility of some kind, whether it be a barn building, training tower or fully functional training center.

As such, a possible solution to the problem of designing and building a facility on a tight budget is to partner with other organizations or build a facility that could be rented to area organizations to offset maintenance costs.

RECOMMENDATIONS

Based on the information gathered through this applied research project, the DMFD should move forward in developing a proposal to build a dedicated training facility. With the growing needs of the DMFD training program and the problems discussed by the DMFD training officers, it appears that such a facility would benefit the department, the city and the community.

Because of the DMFD's position as the largest department within a growing metropolitan area, the option of joining forces with other area organizations in the effort seems plausible. A number of questionnaire respondents noted that partnerships with

other groups had a positive impact on their efforts, and there are many Central Iowa municipalities who could be approached regarding sharing a new training facility.

As the DMFD moves forward with a training facility proposal, it is crucial that the proposal involve a detailed business plan that includes a needs assessment, maintenance and operations plan, potential site recommendations, a financial assessment, and, of course, a cost-benefit analysis and a funding strategy (Booth, 2003, pp. 187-190).

It also seems clear that the department should focus on its needs (and those of surrounding agencies if it is to consider partnering) rather than basing the design on what other facilities around the country have included in their facilities. Though other departments could be used well as examples, their needs may be different and any design should be tailored to best serve the DMFD.

In presenting a proposal for a training facility to the City of Des Moines, a number of factors will come into play. Though the public is more attentive to issues of firefighter preparedness since the tragic events of Sept. 11, 2001, it is important to explain to them how such a facility will benefit them, as they are also attentive to the city's budget issues. Further exploration into the issue of how such a facility would impact home owners' insurance rates may aid in that effort.

The DMFD should decide where in its priorities training lies, and if it is a high priority, the department should move forward and commit itself to proposing a new training facility.

REFERENCES

- Acomb, David (2001, November). Training by design. *Fire Chief*, pp. 44-48.
- Booth, Bill (2000, February). Business blueprint. *Fire Chief*, pp.66-68.
- Booth, Bill, and Schoonover, David (2003, March). Planning and funding a new training facility. *Fire Engineering*, pp. 187-190.
- Lobeto, Alexander D. (2002, January). If you build it... . *FireRescue Magazine*, pp. 36-40.
- Meyer, Steve (1990, December). Regional training organizations: an alternative for smaller departments? *Fire Chief*, pp. 28-30.
- Michard, Don (1991, January). Municipal and private-sector emergency organizations create training center. *Fire Chief*, pp. 42-45.
- Patterson, Don (2003, March). One-stop training. *Fire Chief*, pp. 52-55.
- Schumacher, Joe (1988, March). Sharing a training facility. *Fire Command*, pp. 16-19.
- U.S. Fire Administration (June 23, 2004). USFA 5-Year Operational Objectives [Online]. Available: <http://www.usfa.fema.gov/inside-usfa/about/op-obj.shtm>

APPENDIX A

FEEDBACK INSTRUMENT

Introduction

Thank you for agreeing to provide information for my applied research project.

The following questionnaire has been designed to collect information about what type of training facilities fire departments use. Please answers the questions fully based on your department's training facilities.

1. Fire department you represent:

2. Please indicate the number of people you protect in your department's service area:

3. Does your department use a facility specifically dedicated to training?

Yes

No

(If no, skip to question 10.)

4. Is that facility part of a fire station or in its own building?

Part of a fire station

In its own building

Other (please specify)

5. Do you share your facility with other departments, jurisdictions?

Yes

No

6. If you do share, please describe the sharing arrangement (how and when the facilities are shared, with whom, how the financial responsibility is shared, etc.).

7. When was your facility built?

Between 2 and 5 years ago

Between 5 and 10 years ago

Between 10 and 15 years ago

Between 15 and 20 years ago

More than 20 years ago

8. What types of training does your facility support? (Choose all that apply.)

Classroom training

Physical fitness training

Ground ladder evolutions

Hose advancement and stairwell evolutions

Confined-space rescue

Search and rescue

High-angle rescue

Rapelling

Water diversion

Fire suppression systems

Drafting

CPR classes

Public outreach

Other (please specify)

9. In what ways do you think your access to a dedicated training facility impacts the effectiveness of your training?

10. Why doesn't your department have a facility dedicated to training?

11. Where does your department conduct its training?

12. What types of training does your department facilitate? (Select all that apply.)

Classroom training

Physical fitness training

Ground ladder evolutions

Hose advancement and stairwell evolutions

Confined-space rescue

Search and rescue

High-angle rescue

Rapelling

Water diversion

Fire suppression systems

Drafting

CPR classes

Public outreach

Other (please specify)

13. In what ways do you think your lack of access to a dedicated training facility impacts the effectiveness of your training?

Thank you for taking the time to complete the questionnaire. If you have any questions about the project or the results, please contact Rick Moody at rlmoody@dmgov.org.

APPENDIX B

DEPARTMENTS RESPONDING TO FEEDBACK INSTRUMENT

1. South Metro Fire Department, Colorado
2. Fort Worth Fire Department
3. Orange Fire Department, Texas
4. Walled Lake, Michigan
5. Hillsborough County, Florida
6. Westerville Division of Fire/ Westerville, Ohio
7. Coppel, Texas
8. Clark County Fire Department- Las Vegas, Nevada
9. Lamesa Fire Department
10. Virginia Beach Fire Department
11. Howard Volunteer Fire Department
12. Baltimore County Fire Dept.
13. St. Louis Fire Department
14. Broward Sheriff's Office Department of Fire Rescue
15. Wylie Fire Rescue, Wylie, Texas
16. Reno/Tahoe International Airport
17. Waukee, Iowa
18. Golden, Colorado
19. University Park, IL
20. Oxford, Wisconsin

21. Iona-McGregor Fire District
22. Little Dixie Fire Protection District
23. Langford (BC Canada)
24. City of West Des Moines (Iowa)
25. Swainsboro Fire Dept., Swainsboro Georgia
26. Omaha Fire and Rescue
27. Appleton Fire Department
28. Deltona Fire Rescue Department
29. City of Malden, Massachusetts
30. Irondale Fire Department, Irondale, Alabama
31. London (Ontario, Canada)
32. Garland Fire Department
33. Bedford, Texas
34. Bowling Green Fire Division Bowling Green, Ohio
35. Bullhead City Fire Department, Bullhead City, Arizona
36. Hastings Fire Dept
37. Panama City Fire Dept.
38. Baltimore County Fire Department
39. Middleton Fire Department
40. Clark County Fire Department
41. Burton Fire Dept
42. Manchester, NH
43. Maple Grove Fire Department

44. Highview Fire District
45. South Ogden Fire Department
46. Colerain Township
47. Clark County Fire District 6, Vancouver, WA
48. Franklin, WI, Fire Department
49. West Plainfield Fire Protection District
50. Greenville Fire/Rescue
51. Pampa Fire Department
52. Salina, Kansas
53. City of Franklin
54. Bay County
55. Clark County Fire District # 12
56. Richardson, Texas
57. Bedford, Texas
58. City of Greenfield
59. Winter Park Fire Rescue
60. Bexar County Fire Marshal's Office
61. Chula Vista, California